

Head Start Cares: The Implementation and Impacts of Preschool Social-Emotional Interventions at Scale

Micki Ostrosky: Hi, everybody. Welcome to NCQTL's monthly Front Porch Series. These broadcasts occur on the fourth Monday of each month, and we're happy that you're here to join us today. I am Micki Ostrosky. I will be the moderator for today's talk. I'm from the University of Illinois in Urbana-Champaign, where we are in the middle of the dog days of summer. In fact, my high schooler had -- is having early dismissal today at 1:05, because they don't have air conditioning in their high school. So, I hope wherever you are, it is a little cooler and you're enjoying a nicer summer day.

Today, I am thrilled to introduce our speaker, who is Shira Mattera, who is a research associate in the Manpower Demonstration Research Corporation's policy area on families and children. And Shira's based in their New York City office. She is going to talk about -- her research focus is on children's development, and she currently works on the Head Start CARES Project, where she studies the implementation and impact of social-emotional interventions on preschool children's outcomes. So, that's really what she's going to talk about today. One thing is if you have questions as Shira talks, you can post them.

You'll see that space on your computer. You can post your questions on the screen, and we'll talk about those -- we'll address some of those at the end of the talk. And also at the end of this session, the audio and the Q-and-A part will be posted eventually on the NCQTL website; so, if you look at NCQTL and go under where the Front Porch Series link is, you will see past broadcasts. And probably within a month or so, you will see this broadcast. So, with that said, I'd like to now turn the microphone over to Shira. Thank you.

Shira Mattera: Thanks, Micki. Hi, everyone, I'm Shira Mattera. As Micki said, I'm a research associate at MDRC. And I have been studying the implementation and impact of social-emotional interventions in preschool, and specifically in Head Start, through the Head Start CARES demonstration. I'm excited to walk you through some of the main findings of the CARES study today, and I'll start with some of the details about the CARES research study and the programs that we were implementing, and then I'll talk about how the programs were implemented in the classrooms and what the impacts of each of the enhancements were on teachers, classrooms, and children. Like was said, throughout, feel free to send your questions to the Q-and-A session, and we'll answer them at the end.

Going out with the webinar were a set of resources, and I also have a slide at the end that will link to some of the reports, the CARES reports, and there's a lot more information about everything I'm talking about. So, if I don't get to something, we'll try to get to it at the Q-and-A, but if not, the reports are also starting to be posted now, and you'll be able to find some of your answers in there as well.

Okay, so what is Head Start CARES? CARES is a randomized controlled trial designed to test three strategies for supporting children's social and emotional competence in Head Start. The three programs, which I'll talk about later in more depth, were the Incredible Years teacher training program, Preschool PATHS, and an abridged version of Tools of the Mind. The three programs were referred to as enhancements, because they were intended to enrich and complement the classroom practices that already existed in Head Start. The enhancements were implemented over the course of a school year using a systematic professional development framework to support teacher practice, and I'll talk a little bit more about that. That included training and coaching.

And the project was conducted with 17 grantees and delegate agencies in over 100 Head Start centers and over 300 Head Start classrooms, reflecting Head Start's cultural and geographic diversity. CARES is unique in that along with an impact study, it included a comprehensive mixed-method implementation study focused on coaching, training, and intervention fidelity. Implementation data were collected throughout the preschool year and as well as impact data, which were collected from teacher and parent reports, classroom observations, and child assessments before the start of the school year as well as in the spring of the preschool and kindergarten year.

As I mentioned, the preschool sample included a little over 100 Head Start centers. Full centers were randomly assigned to receive one of the three enhancements or continue Head Start business as usual. In these grantees, business as usual meant a couple things. In about two-thirds of the centers, there was full-day programming and about one-third were part-day. And nearly all of the grantees used Creative Curriculum or High/Scope as their base curriculum.

In addition, classrooms in CARES looked similar to classrooms nationwide on CLASS scores, with classrooms higher in emotional support and classroom organization, around a 5, and lower in instructional support, around a 2.5. Within these 100 centers, a little over 300 teachers and classrooms participated, as well as over 2,600 4-year-old children. As I mentioned, centers within grantees were randomly assigned to one of the three enhancements or a business as usual control group.

So, as you can see, if a grantee had four participating centers, one whole center would implement Incredible Years, one would implement PATHS, one would implement Tools-Play, and one would continue with business as usual. Most of our grantees had four participating centers, but some had eight and one grantee even had 12 participating centers. So, what were the three CARES enhancements that we were studying, these three social-emotional programs? The programs were picked because they had some evidence of impact in earlier smaller-scale studies. And they kind of rose to the top as three theoretically distinct programs at might have -- be hypothesized to change children's social-emotional development in different ways.

The first program was the Incredible Years teacher training program, which trains teachers in classroom management and positive behavior management, building on strong, positive teacher-child relationships. So, in an Incredible Years classroom, teachers might praise positive behavior; they have visual cues around the classroom to help children know what the rules are, and they have cool-down areas for children as well. Preschool PATHS is a more explicit lesson-based program, which includes a weekly large-group lesson and smaller extension activities throughout the week, designed to teach children ways to think about emotions and responses to peers in social interactions.

So, a PATHS lesson may focus on, "This is a sad face. You can tell it's sad because -- by looking at the eyes, by looking at the mouth. What would you do when your friends -- if you're sad because of something a friend did? If your friend is sad, what might you do to help your friend?" The final enhancement, Tools of the Mind-Play, was a one-year enhancement adapted from a two-year comprehensive Tools curriculum that some of you may be more familiar with. In CARES, the curriculum was adapted to focus on promoting children's intentional and self-regulated learning through structured make-believe play activities.

Tools is a little unique in that it kind of pre-screens the whole day, focusing on self-regulation and on how children expand upon their pretend play. What you see here is the Head Start CARES theory of change, which hypothesized that, as you can see on the left, implementation of the enhancements with fidelity, which meant receiving coaching and training and then the teachers implementing the program in the classroom, should lead to strengthening practices or changes in teacher practice, which may lead to changes in improved classroom interactions and would then lead to improved child outcomes with social-emotional skills and social-emotional behaviors.

I'm going to walk through the theory of change today and talk a little bit about each piece of this. Our first question was how the programs were implemented in the classroom. Implementation in the classroom was supported by a comprehensive professional development model that built off of the developers' existing professional development. The professional development model included ongoing training throughout the year and weekly in-classroom coaching. Training ranged from about four to six days, depending on the enhancement, and included both lead and assistant teachers going to the trainings together along with their coaches. Although it wasn't a given at the beginning of CARES with the number of trainings needed to be delivered in such a large number of sites, we were able to obtain high attendance at CARES training.

In addition, coaches for each specific enhancement worked weekly for an hour and a half with the lead and assistant teacher again together in the classroom. Coaches observed classrooms for an hour and then met with teachers for 30 minutes. Again, it wasn't clear at the beginning of CARES that coaching could be achieved at this level around the country, but in fact coaches were able to meet with teachers, generally, as intended and sometimes even longer than intended. Finally, a management information system, which we call an MIS, was put in place to collect research data and monitor how implementation was going. Technical assistance was then provided as issues came up through the MIS. So, coaches could write us and say, "I'm having a problem getting materials," or, you know, "I'm seeing a teacher who's very reticent."

To monitor implementation, coaches and trainers completed logs about implementation in the classroom. So, weekly, coaches reported on how coaching was going. Monthly -- and this is the data I'll talk to you about now -- coaches rated on a scale of 1-5, with 1 being low and 5 being high, how classrooms were implementing the program enhancements. Trainers also reported on implementation inside the classroom every time they visited, about two to three times a year. In general, teachers reported that all three of the enhancements made sense to them and that they were able to implement the enhancements, although they felt that some aspects were harder than others.

For example, they thought that more scripted components of the enhancement were easier to deliver. In addition, they reported that implementing the enhancements seemed to them to make a difference in their classroom. As part of ongoing monitoring of the coach logs, a score of 3 on that scale of 1-5 was set as a benchmark for satisfactory implementation, indicating that teachers were implementing the enhancement occasionally, although perhaps inconsistently.

On average, Head Start CARES classrooms achieved and often exceeded this benchmark, with implementation averaging a 3.47 out of 5 over the course of the year. Coaches also reported that teachers were able to substantially and positively change their level of implementation over the course of the year, with the average Head Start CARES classroom improving about .75 points along the scale of 1-5, so nearly one whole point. Coaches reported that most Head Start classrooms, about 80 percent, scored at least at the basic technical threshold of a 3 in January, and in April, 60 percent of the Head Start classrooms scored at least a 4, which was used to indicate that they were implementing the enhancement well and consistently. Even teachers who began implementation well, at or above a 3, were able to improve.

A majority of the teachers who started the year with a score between 3 and 4 ended the year with a score at or above a 4. However, implementation varied a little across the enhancements. Coaches and trainers rated fidelity as moderately high for Incredible Years, about a 3.7, and Preschool PATHS also got a 3.7, while fidelity for Tools of the Mind-Play was not as strong, 2.97, but still nearly reached the threshold of a 3 that was considered to be satisfactory. The structure, goals, and activities intrinsic to each of these enhancements may have affected implementation in the classrooms.

For example, Incredible Years may have been easier to implement, because teachers were generally familiar with many of the practices being implemented, like positive behavior management, and didn't need to alter their classroom schedules to allow for additional lessons and activities. On the other hand, Incredible Years calls for teachers to change their moment-to-moment interactions with children and how they praise and react to positive and negative behavior, and that could've been difficult. PATHS was also fairly easy for teachers to take on and implement. PATHS activities are fairly contained. Like I said, about once a week. And they take up clear and discrete chunks of time in the week. This likely made it easier for teachers to feel like they could schedule that within their weekly schedule and integrate PATHS into their schedule.

In addition, the activities that needed to be implemented were pre-printed and often highly scripted. If teachers weren't prepared, they could even read the scripts from curriculum that they had and children would still receive the content that they needed, though -- that they needed, although maybe at a lower quality. Because of this, even in the first year of implementation, teachers were able to be prepared and implement the activities. Tools of the Mind-Play was a more complex enhancement for teachers to take on.

The structures of Tools-Play requires teachers to integrate slightly more complex and less familiar activities throughout a new daily schedule. Tools-Play requires a large pretend-play period, about 50 minutes, during the day, which means that teachers have to shift the rest of their schedule, along with a pre-play planning session that teachers and children have to work through. So, this both shifts the daily schedule and requires that teachers work on these new play plans, which is a less common task than sitting on the rug and verbally asking for children's plans. And all of that could've been new for teachers.

In addition, Tools-Play could be time and resource intensive. In Tools-Play, teachers rearranged their classrooms or toys around different play themes every couple of weeks, and while teachers don't have to purchase new toys for those themes, they have to provide new materials; so that either takes time from the classrooms as the children have to make these new toys or new materials or the teachers have to supplement through buying or bringing in their own materials.

We wanted to share some of our lessons learned from implementing these enhancements at scale. Even though these enhancements and coaching and training were implemented in over 300 classrooms, they were able to be implemented fairly well. Coaching and training were provided according to the model created at the beginning of the project, and Incredible Years and PATHS were implemented at moderately high levels of fidelity while Tools of the Mind-Play was implemented on a weaker but still satisfactory level. As a part of this process, we learned quite a bit about implementing social-emotional enhancements to scale across many teachers and centers.

In order to achieve such strong implementation, it was important to include four main components: A comprehensive professional development model, ongoing monitoring and technical assistance, well-articulated enhancements, and organizational buy-in and support, and I'll talk about each of these a little bit. I said a little bit about the training and coaching that was put in place. There's a lot more in the implementation report about that. But training and coaching that was consistent and continued throughout the year was central to teachers being able to implement the program. Teachers have many competing priorities, especially in Head Start, and in order for them to take on a new program and integrate that program's strategies into the classroom on a daily basis, they need support throughout the year, not just once.

Ongoing training helps build a base of understanding from which coaches and teachers could work together on these strategies imparting content knowledge to the teachers. Such high-quality professional development requires certified and skilled trainers who understand the enhancement and can train teachers to use them, and that's no small feat, to have enough trainers to do this at scale. Coaches who worked with teams of teachers then expanded on and individualized the information teachers received in training for the teachers' classrooms or the teacher's ability level, allowing teachers to practice the information or strategies that they had learned in training and then receive feedback on them as they tried out those strategies. Coaches would've been well served to be trained ahead of time, so that they could be expert in the enhancement.

In CARES, they were trained alongside of the teachers, and while the teachers and coaches both reported that they appreciated the relationship, both also reported that it would've been nice for coaches to have the content knowledge ahead of time. But that can get expensive. To aid the coaching process, time and resources also need to be set aside to allow teachers to meet with coaches and go to training. While time-consuming, this professional development model, when put in place in CARES, led to observable changes in what teachers were doing in the classrooms.

In addition, the collection and monitoring of timely implementation data was critical to the success of CARES. As I mentioned, this was achieved using a management information system, or MIS through which coaches and trainers provided information about how implementation was going. This data, however, was only as useful as the monitoring of it was. Someone had to read the data and respond immediately if there were issues or if data wasn't coming in. We highly recommend a system be put in place when implementing an enhancement such as this, as well as specifying a designated entity within the grantee to oversee implementation.

We found that a lot of the times, the barriers that people were reporting were small and could be dealt with very quickly if somebody knew about them. But if they didn't, implementation could lag behind by a few weeks. The person who monitors needs to be quick and provide comprehensive technical assistance based on the MIS data in real time. This includes making sure that the logs are submitted, that coaching and training are happening as often as intended, that teachers are getting good training and getting coaching, and if not, that those issues are being dealt with, and that any issues that come up are addressed immediately.

It could be as simple as getting paper for a coach or as complex as working with a coach and a trainer to help build a relationship with a resistant teacher. Although the CARES enhancements were all well documented, they all had binders of -- of documents and curricula, teachers still struggled just with the sheer amount of prepared materials, manuals, and expectations. Articulating which of the many activities, lessons, and processes helped teachers and coaches know where to focus their attention. The type and quality of the materials mattered also, with more concrete materials and more scripted activities being easier for teachers to implement. How these strategies and materials aligned with the grantees' philosophy also seemed to matter. Enhancements that teachers felt aligned with their grantees' philosophy appeared to improve buy-in and support for implementation.

And I've spoken a little bit less about this with data, but there's more information available in the implementation report about how organizational capacity mattered for implementation. But just to give you a little taste, in general, grantees needed the organizational capacity to support implementation. This included a number of different things, including the ability to hire coaches with appropriate skills and in a timely fashion, the ability to provide space and time for teachers to participate in coaching and training and get there, the ability to supply the needed resources to classrooms to implement the enhancements, and the ability to send messages of support saying this is an important priority and you need to work on it.

These messages of support included clear and consistent messaging, indicating that implementation was a priority, as well as actively working with coaches and teachers in real time to remove barriers for implementation. Additionally, particular challenges arose when the enhancements were implemented while Head Start programs were also under review or implementing other assessments or focusing on other initiatives. Although early childhood programs will always have other responsibilities and requirements, making implementation of the enhancement a high priority is crucial to gaining the necessary backing from teachers and administrators.

So, given that the enhancements were implemented satisfactorily, we turned to the next step in our theory of change. You might remember that we -- the coaching and training needed to happen and teachers needed to implement, and that should lead to the expected changes in teacher practice and classroom climate and then, therefore, children's social-emotional outcomes. When hearing these findings -- so now I'm going to describe what those impacts were, but when hearing these findings, it's important to keep in mind that the findings for each enhancement are discussed in relation to the theory of change developed by the CARES team.

In other words, we developed a theory of change for each enhancement based on discussions with developers, program materials, and input from academic experts. As I describe the impact for each enhancement, I'll describe the team's hypotheses based on the theory of change developed for each enhancement. Also, it's important to remember that estimated impact should be interpreted as the effects of the enhancements over and above any effect of the existing Head Start program in these sites. As you'll recall, the control condition was still implementing Head Start as usual and all the things that Head Start is normally doing. So, this is above and beyond that. First, I'll just walk you through the outcomes that we'll look at, and then we'll walk through the impact for each enhancement.

So, first we'll look at classroom outcomes. Teacher practice and classroom climate were assessed via independent observers who were blind to intervention conditions. Teacher practice was assessed using the Adapted Teaching Style Rating Scale, which was adapted by Cybele Raver and others for the CARES study, on a 1-5 scale with 1 being low and 5 being high. The Adapted TSRS assessed three main subscales of the lead teacher's practice, each of which was a direct target of one of the enhancements.

Incredible Years focused on teachers' classroom management strategies, including things like routines, preparedness, and the use of positive behavior management. PATHS focused on improving teachers' social-emotional instruction including emotion modeling, social problem-solving, and provision of interpersonal support.

Finally, Tools-Play focused on scaffolding children's pretend play. Observers also collected the CLASS as a measure of classroom climate. The CLASS focus is not just on lead teachers but on all the adults in the class. The CLASS in this study included the three widely used domains of classroom organization, emotional support, and instructional support as well as a less widely used domain focused on literacy in the classroom. In addition, a deep set of data collection focused on child outcomes. Both direct assessments and teacher reports were used to assess children's social-emotional skills and behaviors.

We break these skills and behaviors into two areas. First, we assess children's executive function and behavior regulation. This included direct assessments to measure executive function, such as the Head-to-Toes Task, in which a child is taught to touch their head when the assessor tells them to touch their toes and vice versa, sort of like Simon Says; and the Pencil Tap, in which children are asked to tap their pencil twice when the assessor taps once and vice versa.

Teachers also reported on children's behavior problems using the Behavior Problems Index and reported on children's learning behaviors using the Cooper-Farran Behavioral Rating Scale. So learning behaviors, things like persistence and their engagement with school tasks. Next, we assessed children's social-emotional skills and social behaviors. Children's emotion knowledge, or knowledge of emotions, was assessed using two tasks. First, children were asked to identify happy, sad, mad, and scared faces. Then children were told emotionally evocative stories and asked to describe how they would feel if they were the protagonist in that story. Children's social problem-solving was also directly assessed, via the Challenging Situations Task, in which children are told a set of socially difficult stories.

For example, you are playing with a sand castle and Bobby knocked it down, and asked what they would do. Children's responses are coded. For example, hitting the child back would be coded as an aggressive response, while rebuilding the sand castle would be coded as competent. Teachers also rated children's social behaviors in the classroom using the Social Skills Rating Scale. Finally, children's pre-academic skills were assessed directly using the Woodcock-Johnson and Expressive One-Word Picture Vocabulary Test and via teacher reports. Although not a primary question of CARES, there have been developmental theories suggesting that improving social-emotional skills and behaviors could lead to improvements in academic skills.

Although exploratory, CARES also assessed these outcomes for children. So, before we dive in, I wanted to quickly orient you to this graph, which is what our next set of slides will look like. The bar you see is an effect size as described in standard deviation units on the left. On the bottom, the graph is divided into the three teacher practice domains on the left and the four classroom climate domains on the right. Here, for example, you can see that Incredible Years had an impact had an impact of .44 standard deviations on teachers' classroom management, as expected.

So, as I mentioned, Incredible Years -- we'll dive right into the Incredible Years impacts. Incredible Years improved classroom management, as we expected. In addition, Incredible Years had a small impact on teachers' social-emotional instruction in the classroom, which is a secondary focus of Incredible Years. Incredible Years did not have an effect on teachers' scaffolding of pretend play. Moving to the classroom climate outcomes, looking at the green bars on the right, you can see that Incredible Years had no statistically significant impact on any of the CLASS domains, including classroom organization or emotional support, which we would have hypothesized it would.

So, IY had the expected impacts on teacher practice but not classroom climate. Turning to children's social-emotional outcomes, I want to quickly orient you to this chart as well. On the left you see the executive function and behavior regulation outcomes I described earlier. On the right you see social-emotional skills and behaviors. Again, the bars represent effect size. For Incredible Years, we hypothesized that there would be primary impacts on the left side of the graph, especially behavior problems, since Incredible Years was designed to help alleviate problem behaviors in the classroom. As you can see, however, Incredible Years had few impacts on children's executive function and behavior regulation; however, Incredible Years teachers did rate children as having higher levels of learning behaviors than control children. In addition -- this is not shown on the graph -- high-risk children were reported to have reduced problem behaviors. Incredible Years did produce small improvements in children's knowledge of emotions, social problem-solving skills, and social behaviors, outcomes that were not expected to be as directly improved by the Incredible Years approach.

Now, I'll turn to PATHS. Again, we'll start with teacher practice, move to classroom climate, and then children's social-emotional outcomes. As expected, PATHS teachers were rated substantially higher on their social-emotional instructions, so their ability to express emotions, support emotion knowledge, support social problem-solving in children in the classroom than their control group counterparts by nearly one standard deviation. However, PATHS had few of the anticipated effects on classroom climate, specifically no effects on emotional support and classroom organization. PATHS did lead to improvements in teachers' instructional supports, likely because of PATHS' structured whole-group lessons.

So, to summarize, PATHS had the expected impacts on teachers' practice but not classroom climate. Turning to children's skills, PATHS was hypothesized to mainly target children's social-emotional skills and behaviors on the right side of the chart. As can be seen here, PATHS did in fact lead to improvements in children's emotion knowledge, both of faces and of emotionally evocative situations, as well as social problem-solving and social behaviors as reported by teachers. PATHS did not demonstrate impacts on executive function and behavior regulation, but did improve children's learning behaviors.

As you might've noticed, this is a similar pattern to Incredible Years. Turning to Tools-Play, the enhancement also led to the expected changes in teachers' practice, with teachers in Tools-Play classrooms rated as moderately higher on scaffolding play than their control group counterparts, as would be expected. However, as with the other enhancements, Tools-Play did not improve the overall classroom climate as expected.

It did, however, improve the literacy focus in the classrooms. This is perhaps not that surprising, given Tools has many literacy-based activities like graphics practice for children, practice writing letters, or buddy reading, where they read to each other. Turning to child outcomes, Tools-Play did not improve its primary targeted outcomes of executive function. Tools-Play also had no effect on children's behavior problems or learning behaviors. Tools-Play also had few effects on children's social-emotional skills. Children in Tools-Play classrooms did show slightly better knowledge of emotions than their control counterparts.

For the exploratory analyses on children's pre-academic skills, we find no consistent evidence that these three programs had impacts on children's pre-academic skills. Incredible Years children were rated as having better pre-academic skills by their teachers, but these ratings weren't corroborated by children's directly assessed skills. Again, these findings are considered exploratory, given that pre-academic skills were not a target of these enhancements. Just to give you a flavor, CARES also included a small follow-up study of children into kindergarten.

Almost all of the children were followed into kindergarten, where children dispersed widely. For every Head Start center originally in the sample, children dispersed to an average of six different schools. The follow-up study included a more restricted data collection focused on teacher reports but no direct assessments. This is important to keep in mind, given that many of the impacts seen in preschool -- for example, on emotion knowledge and social problem-solving -- were on directly assessed outcomes that we don't have information on in kindergarten. That being said, there were almost no impacts on teacher-reported social-emotional or academic outcomes in kindergarten.

One exception was in Incredible Years, in which teachers rated children who had been in Incredible Years classrooms as having fewer externalizing behavior problems than control children. In addition, a few exploratory outcomes suggest some interesting potential impacts for later on. Incredible Years children showed higher rates of special education receipt than control group peers. This could've made sense if Incredible Years was leading to earlier identification of problem behaviors in preschool or early kindergarten. In addition, intriguingly, PATHS children showed substantially lower rates of the expectation of retention than their control group peers.

So, in other words, in the control group, teachers were expecting to retain about 7 percent of children, and in the PATHS group, teachers reported expecting to retain about 1 percent of children. Although these impacts are fairly exploratory and certainly these outcomes are exploratory, these impacts are intriguing and suggest the need for continued follow-up as children transition into elementary school. There was also little evidence of variation in impact across differing groups of children or school contexts.

So, overall, what do we make of all these findings? First, this test was important in showing that scaling up evidence-based models can produce impacts on social-emotional outcomes of nearly the same size as smaller, more controlled studies when supported with professional development. It's important to remember that these varied in support and quality, and ongoing monitoring and technical assistance as well as the professional development was needed to support implementation throughout the year. This ongoing training and ongoing coaching in which teachers and coaches felt accountable to each other and the administration was involved seemed really important to reaching the levels of implementation that we saw.

Also, because CARES tested theoretically distinct programs, it may also be possible to say something about how to affect different skills for children. Interestingly, it seems that improving children's social-emotional skills and behaviors may be accomplished in two ways, either with more implicit teacher-positive classroom management practices, as in Incredible Years, or with a more explicit lessons-based approach, such as in PATHS.

So, both of those had impacts on how much children knew about emotions and how they figured out how to problem-solve in social situations with their friends. However, it seems that it may be more challenging to improve executive function skills. At any rate, none of the three enhancements in CARES led to measurable improvements in children's executive functions. It also seems that assessing teacher practices may be important for Head Start centers that are interested in improving social-emotional development. In this case, a proximal measure focused on the specific teacher practices that the interventions were targeting to help identify that teacher practices were changing as intended. If programs are implementing new social-emotional interventions or programs, it may be important to assess the specific teacher practices they're targeting and not just classroom practices.

And finally, the long-term academic or social benefits of investing in social-emotional development are not yet clear. While it's clear that these enhancements have an effect on children's outcomes in the short term, more long-term follow-up is needed to follow up on some of these new and intriguing findings on expectation of retention and special education.

Finally, I wanted to highlight a few of the CARES reports and resources available on the OPRE website and on MDRC's website. The implementation report was released in February. The impact report executive summary was released last month at the Head Start Research Conference, and the full report should be up this week, I'm told. There's also a report released on adapting one of the enhancements. We worked with Preschool PATHS for migrant and seasonal Head Start communities. There's a webinar about the migrant seasonal report planned for September as well, and more information will be coming out. CARES also collected data on a subset of 3-year-old children in our classrooms, and the 3-year-old report is expected out later this year.

Finally, the CARES data will be available as a restricted-access file starting this winter. If you want more information, this is my information as well as Pamela Morris, who's the principal investigator, and Ann Rivera, who's our project officer. Thank you.

Micki: Thank you, Shira. Wow, what an impressive study, and so much data, including the implementation data and then all the findings. As we kind of close out now, I will prompt all the participants to make sure then that you sign up for our next Front Porch Series, which is on September 22nd, because during that time, Erin Barton, who's at Vanderbilt University, will present a 10-year follow-up study to a 2003 review she did with others of social-emotional curriculum; so kind of following up on this theme, I think that should be a really nice kind of follow-up of thinking through what are the curriculum that are out there around social-emotional and enhancing the development of young -- of preschoolers, and what does research say? So, again, from all of us, Shira, thank you so much for this really interesting conversation and presentation of the research that you've done. And, as I said earlier in the talk, the audio and the question and answers, because there are a few we didn't get to, will be posted on the NCQTL website under Front Porch Series probably within the next month or six weeks. So, I hope everyone has a great day, and thank you so much, all of you for joining us today. Bye.

Shira: Thanks. Bye.